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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Patrick J. Welch

Serial No.: 10/079,281

Filed: February 20, 2002

Art Unit: 2635

Examiner: To Be Determined

Atty. Docket No.: 01-487-US

SYSTEM AND METHOD FOR REMOTE MONITORING AND MAINTENANCE MANAGEMENT OF VERTICAL TRANSPORTATION EQUIPMENT

RECEIVED
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PRELIMINARY AMENDMENT

BOX **NON-FEE AMENDMENT**
Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

In support of the above-captioned application, applicant submits the following remarks. No fee is believed to be due. However, the Commissioner is authorized to charge any fee which may be associated with the filing of this Amendment to the undersigned's Deposit Account No. 18-0582.

Please amend the above-captioned application as follows:

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being

MAILED

☒ deposited with the United States Postal Service on **April 11, 2002,** with sufficient postage as first-class mail in an envelope addressed to Box NON-FEE AMENDMENT, Commissioner for Patents, Washington, D.C. 20231.

Christine C. McHale, Paralegal

Christine C. McHale

(Signature of person mailing paper or fee)

FACSIMILE

☐ transmitted by facsimile on [date] to the U.S. Patent and Trademark Office.

Type Signature Name

_____

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--CLEAN VERSION--

1) On page 1, lines 7-12 - delete the first paragraph and replace it with the following paragraph:

The present invention is directed to apparatus and methods for remote monitoring and maintenance management of vertical transportation equipment. In particular, the present invention is directed to the field of data capture and management to permit reliable monitoring, repair and maintenance of transportation equipment such as escalators, elevators, moving walkways, baggage carousels, revolving doors, and automated doors.

2) On page 7, lines 19 through page 8, line 5 - delete the third paragraph and replace it with the following paragraph:

The RTU comprises a microprocessor, preferably a personal computer ("PC") comprising a central processing unit (CPU), a display monitor, and communication and connectivity means such as a modem. In a preferred embodiment, the RTU comprises a NEMA rate enclosure housing an industrial Personal Computer (PC) with touch screen and integral membrane keyboard, Programmable Logic Controller (PLC) and communication hardware consisting of an Ethernet hub or switch with optional fiber optic modems. Such RTUs are known, and can be identified or assembled through routine experimentation by one skilled in the art. In a preferred embodiment, the RTU 30 and its supporting software are manufactured and supplied by Rockwell Automation, Inc. and are compatible with the preferred Allen Bradley PLCs. However, Rockwell RTUs and Allen Bradley PLCs are not an absolute requirement The RTU 30 must be compatible with the equipment controller 20 to enable exchange of information between these components. The RTU acts as a data concentrator and view node or "seat" to enable two-way communication of information with the Server Farm 40. The RTU also acts as a buffer for each remote camera and as a communications protocol converter or gateway to communicate with various legacy systems. This is accomplished through the use of additional communication cards in the PLC 80. -

3) On page 8, lines 18 through 25 - delete the second paragraph and replace it with the following paragraph:

Additionally, since each RTU is linked to a camera 80, live images of the transportation equipment 10 are captured and preserved. As shown in Figure 1, each unit of transportation equipment 10 is monitored by one or more streaming video cameras 80 linked to an RTU. Alternatively, the camera may be a closed Circuit TV (CCTV) or security camera. When an equipment failure, fault, or alarm occurs, the camera 80 and RTU software capture and store an image loop of pre-determined length to preserve visual information before, during, and after the fault or alarm.

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REMARKS

The changes requested herein are necessary to correct typographical errors which were made in the specification, and do constitute new matter. The deletion of paragraphs containing the typographical errors, and the replacement using accompanying replacement paragraphs fully correct the observed typographical errors made in the present application.

Respectfully submitted,

Dated: 4/11/02

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Attorneys for Applicant

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